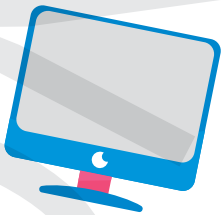


PONY



# October Revision



First Term



### Lesson 1

- » Albert Lin is an archeologist.
- » Above ground tools:
  - ① Satellites and Drones:  
Take photographs of the Earth from above.
  - ② Global Positioning System (GPS):  
Finds the location of something using satellites.
- » Underground tools:
  - ① Magnetometer:
    - Measures the magnetic field.
    - Finds metal underground.
  - ② Ground Penetrating Radar (GPR):  
Discovers objects buried underground.



# Lesson 3

- » Computers are important to write documents, create presentations, create tables, create videos, browse the internet, and play games.
- » The shape and components of computers differ according to:

1 Model

2 Manufacturing date

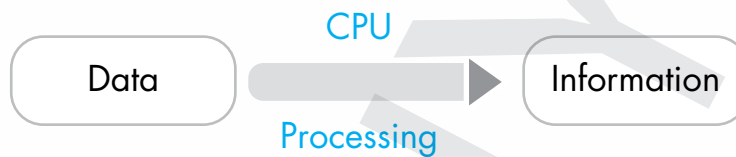
Input Devices		Output Devices	
1 Keyboard	<ul style="list-style-type: none"> <li>To <b>type</b> letters and numbers into the computer.</li> </ul>	1 Screen	<ul style="list-style-type: none"> <li><b>Shows</b> what you and the computer are doing.</li> </ul>
2 Mouse	<ul style="list-style-type: none"> <li>To <b>select</b> and <b>move</b> things easily.</li> </ul>	2 Speaker	<ul style="list-style-type: none"> <li>To <b>hear</b> others.</li> <li>To <b>output sound</b>.</li> </ul>
3 Camera	<ul style="list-style-type: none"> <li>To allow others to see you.</li> <li>To <b>input images</b> or <b>videos</b> into the computer.</li> </ul>	3 Printer	<ul style="list-style-type: none"> <li>To <b>output texts</b> or <b>images</b> from your computer <b>on</b> paper.</li> </ul>
4 Microphone	<ul style="list-style-type: none"> <li>To allow others to hear you.</li> <li>To <b>input sound, audio, and music</b> into the computer.</li> </ul>	4 Braille terminal	<ul style="list-style-type: none"> <li>It allows <b>blind people</b> to use computers. (<b>How?</b>)</li> <li>It converts text on the screen into <b>Braille characters</b>.</li> </ul>
5 Scanner	<ul style="list-style-type: none"> <li>To <b>input</b> texts and <b>images</b> from paper <b>into</b> the computer.</li> </ul>	5 Speech synthesizer	<ul style="list-style-type: none"> <li>It allows <b>non-verbal</b> people to speak. (<b>How?</b>)</li> <li>It changes <b>text</b> to <b>speech</b>.</li> </ul>



- A touch screen can be used as an **input device** and an **output device**.

## Lesson 4

- » **The CPU:** It is a device that is used to process data and converts it into information.



Software	
1. Operating System	2. Programs (Applications)
<p>» It is a software system that manages hardware and software.</p> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>• <b>Windows:</b> It is the most famous operating system for computers.</li> <li>• <b>Android:</b> It is the most famous operating system for cell phones.</li> </ul>	<ol style="list-style-type: none"> <li>1 <b>MS Word:</b> It is used to write documents or reports.</li> <li>2 <b>MS Excel:</b> It is used to create tables and graphs.</li> <li>3 <b>MS PowerPoint:</b> It is used to create presentations.</li> <li>4 <b>Google Chrome:</b> It is a browser that allows you browse websites on the internet.</li> <li>5 <b>Gaming applications:</b></li> </ol>

## Lesson 5

- » **Assistive Technology:** It helps people of determination (disabilities) to do daily activities.

Disabilities	Assistive Technology
<ul style="list-style-type: none"> <li>• Limb difference (amputated leg)</li> </ul>	<ul style="list-style-type: none"> <li>• Prosthetic legs</li> <li>• Paracimbing tools (for climbers with Limb differences)</li> </ul>

• Trouble hearing	• Hearing aids
• Visually impaired people (trouble in vision)	• Screen magnification software • Cell phones with large buttons • Ball that makes noise
• Blind people	• Braille method (convert letters to prominent symbols)
• Speech and language disabilities	• Alternative communication software (change text into speech and vice versa)

### » Stephen Hawking used:

- 1 Motorized wheelchair to move.
- 2 Speech synthesizer to communicate.

## Lesson 6

### » ICT tools might have a temporary breakdown or failure.

- 1 An app doesn't open: Restart → check update → uninstall & reinstall app.
- 2 The mouse/ keyboard doesn't work: Make sure it is connected correctly, then restart → replace the mouse/keyboard with a new one.
- 3 Your screen freezes: Press "Alt+Ctrl+Del" → Restart.
- 4 You can't find a file: Use the Search box in Start menu.



- 1 Restarting a device can often solve many common ICT problems.
- 2 If you have tried but can't solve the problem, the last step is to ask your teacher or family for help.